

Fraud and Abuse in Construction and Major Capital Projects

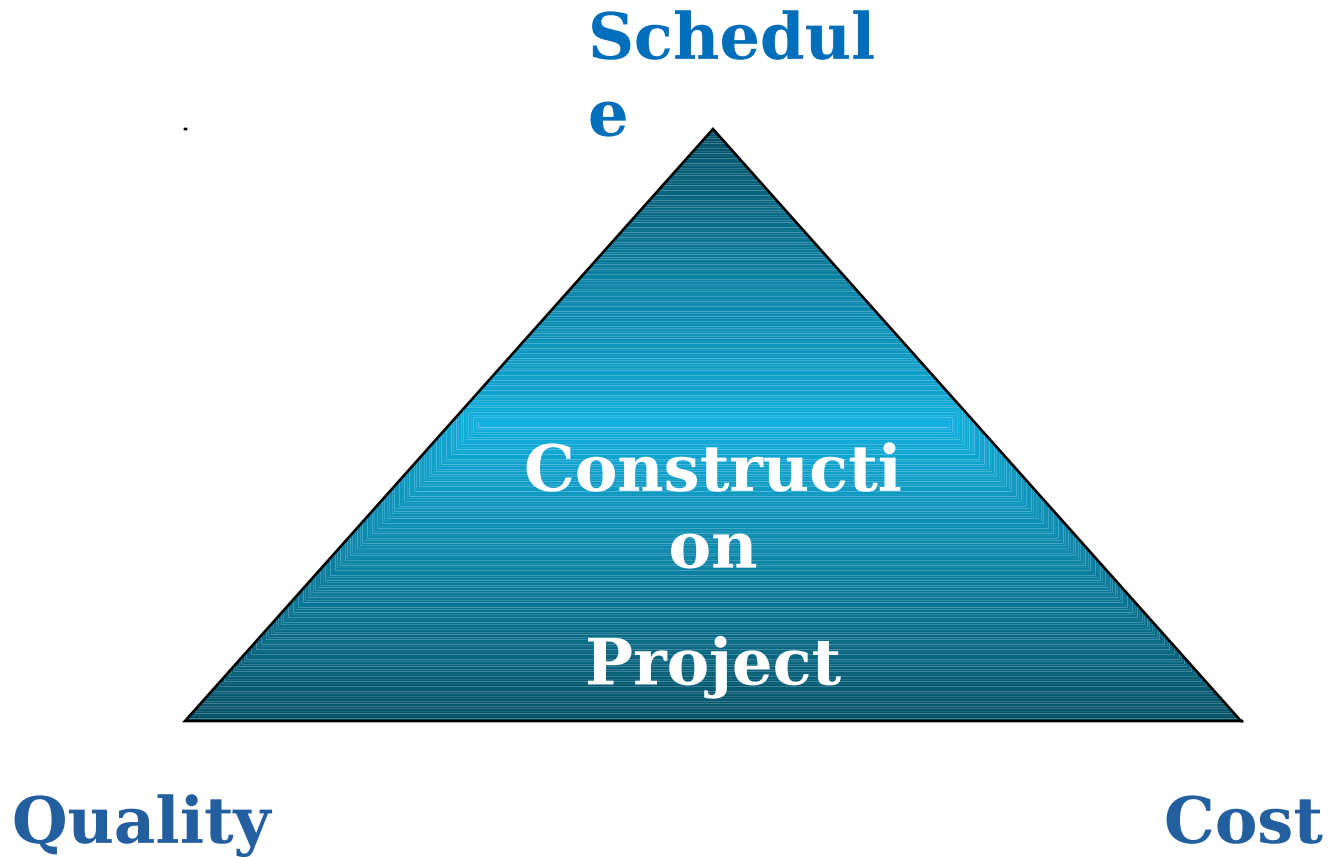
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CS 4-2

Topics

- Elements of a construction project
- Risk factors
- Contractor costs
- Types of contracts
- Red flags
- Overcharge examples
- Reasons for auditing and selection of projects for audit
- Contents of a Construction Audit Program
- Questions

Elements of a Construction Project



Construction Project Risks

- Project Feasibility
- Funding
- Planning
- Engineering
- Delivery Method
- Contract type
- Regional business conditions
- Contractor
- Means and Methods
- Owner involvement
- Regulatory conditions
- Site Issues
- Labor issues
- Loss or damage issues
- Guarantees
- Material Supply
- Architect & Engineer

Composition of Contractor Project Costs

- Labor
 - Materials
 - Equipment (Contractor owned & third party rental)
 - Sub or Trade Contractors
 - General Conditions
 - Insurance
 - Bonds – Bid, Performance, Payment, Warrantee
 - Small tools, expendables & consumables
 - Relocation & travel
 - Home office charges
 - Permits & licenses
- Big 5
85 – 90%
- 10 – 15%

Types of Contracts

- Lump Sum, Fixed Cost, Stipulated Sum
 - Design, Bid, Build
 - EPC (Engineer, Procure, Construct)
- Cost Reimbursable or Cost Plus
 - Cost Plus with Fixed or Percentage Fee
 - Cost Plus with Guaranteed Max (GMAX or GMP)
 - Cost Plus with GMAX & Shared Savings
 - Target Price
 - Design Build
- Unit Price
- Time & Material

Time Reporting

A Project Manager dies on a fishing accident on his 40th birthday and finds himself greeted at the Pearly Gates by a brass band.

Saint Peter runs over, shakes his hand and says "Congratulations!"

"Congratulations for what?" asks the Project Manager.

"Congratulations for what?" says Saint Peter.

"We are celebrating the fact that you lived to be 160 years old."

"But that's not true," says the Project Manager. "I only lived to be forty."

"That's impossible," says Saint Peter, "we added up your time sheets."

Contract Risk

Cost Reimbursable

- Labor
 - Rates & Fringes
 - Excess reported hours
 - Uncompensated overtime
 - Travel & reimbursable
 - Union rates
 - Subsistence
 - Ghosts
- Materials
 - Trade & other discounts
 - Excessive material
 - Scrap & returns
 - Sources
 - Rework

Contract Risk

Cost Reimbursable

- Equipment
 - Charge exceeds purchase price or FMV
 - Excess damage costs
 - Sweetheart deals
 - Rent to own Taxes on fuel
 - Equipment not on job
 - Rental rebates not credited
- Subcontractors
 - Over billing
- General Conditions
 - Duplicate charges
 - Inaccurate prorating
- Insurance
- Bonds – Bid, Performance, Payment, Warrantee
- Home office charges
- Charging for non-reimbursable costs
- Permits & licenses
- Fines
- Mathematical errors

Determining Chargeable Costs

- Who is eligible to charge?
- What is a chargeable cost?
- When may the cost be charged?
- Where was the work performed?
- How much may be charged?

Example of Labor Overcharge

Classification	Difference	Comment
Health and Welfare	\$1.85	Contractor did not pay at rate used
Pension	1.20	Contractor did not pay at rate used
Association Dues	.50	Component of overhead
Safety/education	.50	Component of overhead
Small Tools /Truck	3.00	Contractor did not provide
Gas Premium	1.00	Gas cost is not generally considered a labor cost
SUTA/FUTA	.83	Limitations excluded
Workers/Compensation	(1.55)	Audited rate higher
General Liability Ins.	2.56	calculated as 15.5% of payroll actual cost was 1.415% of revenue
Total Hourly Difference	\$9.89	

Bidding

Three contractors were touring the White House on the same day. One was from New York, another from Missouri, and the third from Florida. At the end of the tour, the guard asked them what they did for a living. When they each replied that they were contractors, the guard said, "Hey we need one of the rear fences redone. Why don't you guys take a look at it and give me your bids." First the Florida contractor took out his tape measure and pencils, did some measuring and said, "I figure the job will run about \$900 - \$400 for materials, \$400 for my crew, and \$100 profit for me."

Next was the Missouri contractor. He also took out his tape measure and pencil, did some quick calculations and said, "Looks like I can do this job for \$700 - \$300 for materials, \$300 for my crew, and \$100 profit for me."

Finally, the guard asks the New York contractor for his bid. Without batting an eye, the contractor says, "\$2700."

The guard, incredulous, looks at him and says, "You didn't even measure like the other guys! How did you come up with such a high figure?"

"Easy," says the contractor from New York, "\$1000 for me, \$1000 for you, and we hire the guy from Missouri."

Contract Risks

Stipulated Sum, Lump Sum or Fixed Fee

- Materials outside specification
- Quantities not installed
- Change orders in original bid
- “Front End” or “Top Loading”
- Bonds not obtained
- Change orders not priced correctly
- Services not provided
- Improper construction methods
- Insurance not purchased
- Unauthorized subcontractors used
- Tax errors
- Contract work performed by owner’s employees
- Owner supplied material not credited

Unit Price

- Erroneous estimates
 - Mobilization/demobilization
 - Improper measuring/quantity verification
- Re-calculation clause omitted, missing or not applied

Contract Risk T & M

- Use of incorrect labor rates
- Overstated time sheets
- Use of incorrect material mark ups
- See Cost Plus

Owners Project Management Team

- Project Manager and/or Owners Representative
- Purchasing
- Legal
- Contract Administration
- Finance & Accounting
- Auditing
- Tax (consult)
- Risk Management (consult) - OCIP

Red Flags

- Contract supplied by the contractor
- Owner has no or an in-effective project management team
- No Right-to-Audit Clause
- Weak Change Order Language
- Omitted Termination for Convenience clause
- Labor rates attached to a cost plus contract
- Missing exhibits to the contract
- Contract not executed
- Billing in a non-standard manner or format (s/b AIA G702 and G703)
- Bonding not required
- Failure to obtain lien waivers and reconcile
- Un-reconciled CIP account or incomplete reconciliation
- Disorganized work site
- Lack of clear lines of authority

Overcharge Examples

- Defective Pricing in CO's
- Unauthorized Items Billed
 - Home office charges
 - Other
- Labor Overcharges
- Materials Not Used on Job
- General Conditions
- G/L Insurance - Experience Modifiers
- Duplicate Charges
- Equipment Billed Not in Use
- Bonds not purchased
- Backcharges not accomplished
- Scrap not Credited
- Unauthorized Substitution of Materials

Goals of a Construction Audit

- Identify Cost Avoidance Opportunities
- Manage Risk
- Ensure Controls Are Developed & Maintained
 - Owner
 - Contractor
- Identify Overcharges/Undercharges
- Avoid Litigation

How should projects be selected for audit?

- Size (\$ value & physical size)
- Type of contract
 - Cost Plus & T&M versus Lump Sum
 - Shared Savings Features
- High profile or high risk projects
- Experience of Owner's Representative
- Experience with the General Contractor

Elements of a typical construction audit program

- Contract Review
- Bid Review
- Control Assessment
- Contractor Billing Tests - Progress Billings
 - Labor
 - Materials
 - Equipment (Contractor owned & rented)
 - Subcontractor charges

Elements of a typical construction audit program

- Contractor Billing Tests (continued)
 - Permits and licenses
 - Miscellaneous charges (small tools & consumables)
 - Overhead charges
 - Contractor fee
 - Retainage calculation
 - Performance bond & insurance
 - Home office charges

Elements of a typical construction audit program

- Contractor Billing Tests (continued)
 - Physical inspection and review of engineering inspection reports
 - Relocation & travel
 - Percent completed
- Control Verification

Elements of a typical construction audit program

- Financial Review
 - Lead schedules
 - Receivables
 - Payables
 - Construction in Process (CIP)
 - Fixed Assets

Life Cycle

- | | |
|------------------------|---------------------|
| • Construction Project | • Audit Involvement |
| – Conception | – None |
| – Planning | – Yes |
| – Contracting | – Yes |
| – Construction | – Yes |
| – Closeout | – Yes |
| – Lessons Learned | – Yes |

When Should Construction Projects be Audited?

- Begin at Planning
- Concurrently Throughout the Project
- Closeout

Questions

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